REMARKS

I. Summary of Office Action

Claims 1, 3, 6, 17 and 22-25 were pending in this application.

Claim 22 was rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

Claims 1, 3, 6, 17 and 22-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 6,141,488 (hereinafter "Knudson") in view of US Patent No. 6,208,799 (hereinafter "Marsh") in further view of US Patent Application No. 2002/0081096 (hereinafter "Watanabe") and in further view of US Patent No. 6,564,005 (hereinafter "Berstis").

II.   Summary of Applicant's Response

Applicants have amended claim 22 to more particularly define the invention. The claim amendment is fully supported by the application as originally filed and therefore does not add new matter. *See e.g.*, paragraphs 0040, 0046 and 0051 as well as Figs. 2 and 5-7 of applicants' specification. The Examiner's rejections are respectfully traversed.

II. Applicants' Response to the Rejection under 35 U.S.C. § 112

Claim 22 was rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

Applicants have amended claim 22 to remove features that the Examiner finds problematic. Moreover, applicants have amended claim 22 to recite "determining if a conflict exists, if a number of available tuners is less than resources required to completely transfer a plurality of timeslots scheduled to be transferred to said storage device." Applicants respectfully submit that the specification explicitly discloses applicants' invention as recited in amended claim 22. For example, paragraph 0051 of the specification recites that, "[It] is determined if the number of available tuners during timeslot z is less than what is needed to completely transfer timeslot z and any other shows that are scheduled during that timeslot (i.e.,

there is a conflict)."

Hence, the specification enables one skilled in the art to make or use the invention as recited in claim 22, and applicants respectfully request that the rejection of claim 22 under 35 U.S.C. § 112, first paragraph, be withdrawn.

III. Applicants' Response to the Rejection under 35 U.S.C.§ 103(a)

Claims 1, 3, 6, 17 and 22-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Knudson in view of Marsh in further view of Watanabe and in further view of Berstis. Applicants respectfully traverse this rejection for the reasons set forth below.

A. Claims 1 and 22:

Applicants' independent claim 1 is directed to a method for transferring a broadcast signal to a storage device. Instructions to transfer to a storage device two or more timeslots on one or more channels are received. If the instructions cause a conflict, the conflict is resolved. More specifically, a first one of the timeslots, which includes a user extended lead or trail timeslot, is given a first priority, while a second one of the timeslots, which includes a core timeslot that is treated as a separate entity from the extended timeslot, is given a second priority. If the user does not choose a solution to the conflict, the conflict is resolved automatically, by selecting the first priority or the second priority as the higher priority, depending on whether the first timeslot is a trail or lead timeslot. Thus, applicants' independent claim 1 is directed to resolving a conflict that arises because of a user extended timeslot. Applicants' claimed method resolves such a conflict by associating the timeslots with varying priorities depending on whether these timeslots include core timeslots or extended timeslots, in the absence of a user input.

Knudson refers to a system that allows a user to record and view programs from different television channels. In one embodiment, when two programs from different television channels are scheduled to be recorded, the system always eliminates the trailing buffer of the first program so that the beginning of the second program is not lost when both programs are recorded (column 7, lines 40-57).

Marsh refers to a TV cable system which includes a set-top whose VCR recording functions are automatically adjusted in order to accommodate time delays and program cancellations. In particular, the system receives new programming data and compares it to programming data that was previously stored in a VCR-record-timer. If the system detects a conflict between the two sets of data, the system clears the VCR-record-timer and alerts the user (column 10, lines 1-34).

Watanabe refers to an image recording apparatus that allows for the prioritization of programs scheduled for unattended recording when there is an overlap between the recording start times and the recording end times. For instance, Fig. 3 of Watanabe shows an unattended recording preset routine where the system compares previously stored program information to recently received program information and identifies overlaps between recording start and end times. When there is an overlap, the user is asked to prioritize the programs to be recorded. In the absence of a user response, the system may prioritize the programs (paragraphs 0073-0079).

Berstis refers to a multi-user system for time-shifting television program viewing. The system provides each user with a user profile which includes a list of programs the user wishes to record. As shown in Fig. 10, the user profile also includes other user-specific information such as the quality of compression to use in recording programs and the importance of recording certain programs (column 8, line 57 through column 9, line 17).

Applicants respectfully submit that the combination of Knudson, Marsh, Watanabe and Berstis fails to teach or suggest all of applicants' features as defined in the independent claim 1. In fact, Knudson, Marsh, Watanabe and Berstis do not even contemplate, let alone solve, the problem addressed by applicants' invention. Applicants' claimed invention allows a user to extend the core timeslot of a program scheduled to be recorded in order to, for example, save part of a pre-game show for a sports event (see paragraph 0009 of specification).

If the number of timeslots scheduled to be recorded at a particular time exceeds the number of available tuners, the system determines that a conflict has occurred (see paragraph 0051 of specification). Applicants' claimed invention addresses, among other

problems, the issue of resolving timeslot conflicts that arise because of a user extended timeslot by using a prioritization system such as the one shown in Table 2 of applicants' specification. In particular, the system prioritizes a timeslot depending on whether the timeslot is a core timeslot or a user extended lead/trail timeslot. As an example, if there is a conflict between the body of content scheduled to be recorded (a core timeslot) and a user extended lead timeslot, the system determines that the core timeslot has a higher priority, and the user extended lead is not recorded (see Fig. 16; paragraphs 0066-0067; and Table 2 of specification). This guarantees that all the core timeslots of content are recorded even if they conflict with timeslots that the user has added to other content.

The Examiner states that Knudson fails to disclose core and extended timeslots that have various priorities and tries to make up for this deficiency by relying on Marsh (see pages 5 and 6 of Office Action).

Although Marsh suggests priority schemes for resolving conflicts in VCR-record-timers, nowhere does it distinguish core timeslots from extended timeslots, when it comes to prioritizing timeslots to be recorded. The example relied on by the Examiner uses a priority scheme for "clearing the conflicting VCR-record-timer whose record time that is the most distant from the current time" (column 10, lines 1-34). Like any other example disclosed in Marsh (e.g., column 9, lines 61-67), this example merely refers to clearing a record timer when a timeslot conflict arises and does not distinguish between different priorities associated with core timeslots relative to extended ones. Accordingly, Marsh does not teach or suggest an extended lead or trail timeslot having a first priority and a core timeslot having a second priority, as recited in applicants' claim 1.

Additionally, even though Watanabe allows a user or the system to prioritize programs scheduled to be recorded, Watanabe does not teach or suggest differentiating between core timeslots and extended timeslots in order to prioritize these programs. Rather, as shown in Fig. 4, when there is an overlap between the recording start and end times of two programs such as programs A and B, Watanabe merely allows for the prioritization of entire program timeslots (e.g., the higher priority is given to program A or program B) without distinguishing between the core and extended timeslots of programs A and B. Accordingly,

Watanabe also does not teach or suggest an extended lead or trail timeslot having a first priority and a core timeslot having a second priority, as recited in applicants' claim 1.

Furthermore, while Berstis allows a user to prioritize programs scheduled to be recorded, nowhere does Berstis teach or suggest distinguishing between core timeslots and extended timeslots during the prioritization. In the example relied on by the Examiner, the user can give a first program a priority of 1 and a second program a priority of 3 to indicate the importance of recording the two programs. If both programs are scheduled to be recorded at the same time, the system will only record the first program since it has the higher priority (Fig. 10 and column 8, line 57 through column 9, line 17). Accordingly, Berstis also does not teach or suggest an extended lead or trail timeslot having a first priority and a core timeslot having a second priority, as recited in applicants' claim 1.

From the foregoing, it is clear that Knudson, Marsh, Watanabe and Berstis do not contemplate, let alone solve conflicts involving core and extended timeslots by prioritizing the timeslots, as specified in applicants' claim 1. As mentioned above, claim 1 resolves a conflict that arises due to a user extended timeslot that overlaps with the body of content (i.e., a core timeslot) by treating the extended timeslot and the core timeslot as different entities and assigning them varying priorities. None of the references relied on by the Examiner distinguish between these timeslots and assign them different priorities. This is not surprising given that these references do not even consider situations in which user extended timeslots conflict with core timeslots.

For the foregoing reasons, applicants submit that, even if Knudson, Marsh, Watanabe and Berstis were combinable (which applicants reserve the right to dispute), the alleged combination fails to teach or suggest all of the features of claim 1. Accordingly, the Examiner has failed to make a prima facie case of obviousness with respect to claim 1.

For the reasons set forth above, independent claim 1 is allowable over the cited references. Claim 22 depends from allowable claim 1 and is therefore allowable for at least the same reasons. Therefore, applicants respectfully request that the §103 rejection of claims 1 and 22 be withdrawn.

B. Claims 3, 17 and 23:

Applicants' independent claims 3 and 17 are also directed to a method and system for transferring a broadcast signal to a storage device and resolving conflicts potentially caused by instructions to effect such transfers. In this instance, a first timeslot, which includes an automatically extended lead or trail timeslot (as opposed to the user extended timeslot specified in claim 1), has a first priority while a second timeslot, which is not an automatically extended timeslot, has a second priority. The conflict is resolved automatically by selecting the second priority as the higher priority, if the user does not choose a solution to the conflict. Accordingly, much like in claim 1, conflict resolution according to each of claims 3 and 17 is based on a technique in which timeslots are associated with varying priorities depending on whether these timeslots include automatically extended timeslots. It can therefore be seen that claims 3 and 17 resolve conflicts that arise because of an automatically extended timeslot (as opposed to a user extended timeslot as specified in claim 1).

Much like allowing a user to extend timeslots, applicants' invention according to claims 3 and 17 allows for automatically extending the core timeslot of a program scheduled to be recorded in order to, for example, avoid missing content if the broadcaster's clock and the system's clock are out of sync (see paragraph 0009 of specification). If two conflicting timeslots include a timeslot automatically added by the system (an automatically extended timeslot) and a timeslot not automatically added by the system (e.g., a user extended timeslot or a core timeslot), the system may, for example, determine that the timeslot not automatically added by the system has a higher priority, and the automatically extended timeslot is not recorded (see Fig. 15; paragraphs 0064-0065; and Table 2 of specification). In this situation, the invention ensures that the user's recording preferences are given priority over the system's automatic extensions.

The Examiner once again relies on the combination of Knudson, Marsh, Watanabe and Berstis to show the features described above (see pages 4-7 of Office Action).

However, applicants have demonstrated in the preceding section that none of these references teach or suggest a first timeslot that is an extended lead or trail timeslot

having a first priority and a second timeslot that is a core timeslot having a second priority, regardless of whether such an extended timeslot is a user extended timeslot or an automatically extended timeslot. The same arguments apply if the second timeslot were anything other than an automatically extended timeslot (e.g., a user extended timeslot or a core timeslot).

Accordingly, claims 3 and 17 are also allowable at least for the same reasons that claim 1 is allowable. Similar to the discussion regarding claim 1, claims 3 and 17 resolve conflicts that arise due to an automatically extended timeslot that overlaps with other timeslots, such as a user extended timeslot or the body of content (i.e., a core timeslot), which is not even anticipated by the references relied on.

Claim 23 depends from allowable claim 17, and is therefore allowable for at least the same reasons. Therefore, applicants respectfully request that the §103 rejection of claims 3, 17 and 23 be withdrawn.

C. Claim 6:

Applicants' independent claim 6 is again directed to a method for transferring a broadcast signal to a storage device and resolving conflicts. According to this claim, a plurality of solutions for resolving a conflict, as well as a corresponding cumulative priority for each solution, are determined. A cumulative priority is determined from a user extended lead timeslot that is given a first priority, a user extended trail timeslot that is given a second priority, an automatically extended lead or trail timeslot that is given a third priority, and a core timeslot that is given a fourth priority. The conflict is resolved by choosing a solution out of one or two lowest priority solutions if the user does not choose a solution from the ones the user is presented with.

The Examiner contends that Knudson discloses "establishing cumulative priority for each of said solutions" and "determining and choosing one or two lowest priority solutions" (see page 7 of Office Action).

The portions referenced by the Examiner in Knudson (Figure 7a, Elements 102, 104, 106 and 108) show a method of determining whether a program selected for recording has been locked, recording the program if it is not locked and requesting and comparing a parental

control PIN if it is locked. It is very unclear how recording a program that is locked through a parental control mechanism can in any way be likened to choosing low priority solutions to a conflict based on established cumulative priorities for various solutions. Contrary to the Examiner's contention, applicants submit that Knudson does not show establishing a cumulative priority for solutions as recited in claim 6. First, the particular method outlined in Figure 7a of Knudson does not determine and present a user with solutions to a conflict as claimed by applicants because there is no conflict between timeslots identified in Knudson. Second, there is no mention whatsoever of any cumulative priority in Knudson. Figure 7a Elements 106 and 108 show the options available when a selected program is locked and when it is not locked. Presenting such different options when a program is locked and when it is not locked cannot be compared with presenting solutions to a conflict based on a cumulative priority. Not only does Knudson not show the above features recited in claim 6, but neither do Marsh, Watanabe nor Berstis.

For the foregoing reasons, applicants submit that, even if Knudson, Marsh, Watanabe and Berstis were combinable (which applicants reserve the right to dispute), the alleged combination fails to teach or suggest all of the features of claim 6. Accordingly, the Examiner has failed to make a prima facie case of obviousness with respect to claim 6.

For the reasons set forth above, claim 6 is allowable over the cited references. Therefore, applicants respectfully request that the §103 rejection of claim 6 be withdrawn.

D. Claims 24 and 25:

Claims 24 and 25 are yet again directed to a method and system for transferring a broadcast signal to a storage device and resolving conflicts. According to these claims, a system queue is provided for receiving timeslots that cause a conflict, and the conflict is resolved by comparing the timeslots in the system queue.

The Examiner states that Knudson, Marsh and Watanabe fail to disclose, among other things, providing a system queue. The Examiner tries to make up for this deficiency by relying on Berstis. Specifically, the Examiner contends that Berstis teaches "a queue of available programs for recording" (see page 8 of Office Action).
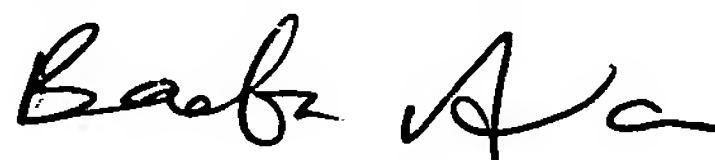
Berstis, however, describes allowing a user to create a user profile that contains user information, and a program schedule that contains a list of programs to be recorded (Figure 10). The program schedule may include information about a program to be recorded such as the channel, days of the week, and hours to record (column 8 lines 57-65). Although Berstis discloses allowing a user to create a list of programs scheduled to be recorded, Berstis does not show or suggest providing a system queue to receive timeslots that cause a conflict in recording. This is because the program schedule in Berstis contains all the programs the user is interested in recording while applicants' claimed system queue includes specific timeslots that cause a conflict in recording.

For the foregoing reasons, applicants submit that, even if Knudson, Marsh, Watanabe and Berstis were combinable (which applicants reserve the right to dispute), the alleged combination fails to teach or suggest all of the elements of claims 24 and 25. Accordingly, the Examiner has failed to make a prima facie case of obviousness of claims 24 and 25. Therefore, applicants respectfully request that the §103 rejection of claims 24 and 25 be withdrawn.

IV. Conclusion

For at least the reasons set forth above, applicants respectfully submit that this application is in condition for allowance. Reconsideration in light of the foregoing remarks and a favorable action are respectfully requested.

Respectfully submitted,

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